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| APPLICATION NO.                            | FILING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO |
|--|---------------|----------------------|------------------------|-----------------|
| 09/771,279                                 | 01/26/2001    | Boris A. Kurchuk     | 1294-00 (Kurchuk 3)    | 9162            |
| 75   | 90 11/08/2004 |                      | EXAMINER               |                 |
| IP Department                              |               |                      | HEALY, BRIAN           |                 |
| Schnader Harrison Segal & Lewis 36th Floor |               |                      | ART UNIT               | PAPER NUMBER    |
| 1600 Market Street                         |               |                      | 2883                   |                 |
| Philadelphia, PA 19103                     |               |                      | DATE MAILED: 11/08/200 | 4               |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |   | <b>r</b> tu  |  |  |  |  |
|---|---|--|--|--|--|--|
|   | Application No.   | Applicant(s)   |  |  |  |  |
|   | 09/771,279  | KURCHUK, BORIS A.  |  |  |  |  |
| Office Action Summary   | Examiner  | Art Unit   |  |  |  |  |
|   | Brian M. Healy  | 2883   |  |  |  |  |
| The MAILING DATE of this communicati Period for Reply   | on appears on the cover sheet wi  | th the correspondence address  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNICAT  - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communica  - If the period for reply specified above is less than thirty (30) day  - If NO period for reply is specified above, the maximum statutory  - Failure to reply within the set or extended period for reply will, be any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b). | CFR 1.136(a). In no event, however, may a retion. s, a reply within the statutory minimum of thirty period will apply and will expire SIX (6) MON y statute, cause the application to become AB | eply be timely filed  y (30) days will be considered timely.  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133). |  |  |  |  |
| Status  |   |  |  |  |  |  |
| 1) Responsive to communication(s) filed or  | 1 <u></u> .   |  |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b)   | ☐ This action is <b>FINAL</b> . 2b)☑ This action is non-final.  |  |  |  |  |  |
| 3) Since this application is in condition for a   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |  |  |  |  |  |
| closed in accordance with the practice u  | nder <i>Ex parte Quayle</i> , 1935 C.D  | . 11, 453 O.G. 213.  |  |  |  |  |
| Disposition of Claims   |   |  |  |  |  |  |
| 4) Claim(s) 1-18 is/are pending in the application  | Claim(s) <u>1-18</u> is/are pending in the application.   |  |  |  |  |  |
| 4a) Of the above claim(s) is/are w  | 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |  |  |  |  |
| 5)⊠ Claim(s) <u>17 and 18</u> is/are allowed.   | Claim(s) <u>17 and 18</u> is/are allowed.   |  |  |  |  |  |
| 6) Claim(s) <u>1,3-5,7,8 and 13-16</u> is/are reject  |   |  |  |  |  |  |
| 7) Claim(s) <u>2,6 and 9-12</u> is/are objected to.   |   |  |  |  |  |  |
| 8) Claim(s) are subject to restriction  | and/or election requirement.  |  |  |  |  |  |
| Application Papers  |   |  |  |  |  |  |
| 9) The specification is objected to by the Ex   |   |  |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>26 January 2001</u>   |   | · ·  |  |  |  |  |
| Applicant may not request that any objection  |   |  |  |  |  |  |
| Replacement drawing sheet(s) including the  |   |  |  |  |  |  |
| 11) The oath or declaration is objected to by   | the Examiner. Note the attached   | Office Action or form PTO-152.   |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |  |  |  |  |  |
| 12) ☐ Acknowledgment is made of a claim for for forms a) ☐ All b) ☐ Some * c) ☐ None of:  | oreign priority under 35 U.S.C. §   | 119(a)-(d) or (f).   |  |  |  |  |
| 1. Certified copies of the priority doc   |   |  |  |  |  |  |
| 2. Certified copies of the priority doc   |   |  |  |  |  |  |
| 3. Copies of the certified copies of th   |   | received in this National Stage  |  |  |  |  |
| application from the International I  * See the attached detailed Office action for   | ` ' ' '   | Brian Healy  |  |  |  |  |
| Attachment(s)   |   | Printary Examiner  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)   | 4) 🔲 Interview S  | ummary (PTO-413)   |  |  |  |  |
| <ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-93) Information Disclosure Statement(s) (PTO-1449 or PTO.</li> </ul>  |   | )/Mail Date formal Patent Application (PTO-152)  |  |  |  |  |
| Paper No(s)/Mail Date 10282004.   | 6) Other:   |  |  |  |  |  |

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## **DETAILED ACTION**

## Allowable Subject Matter

Claims 2, 6, and 9-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The closest prior art of record, Varasi et. al. '390 does not teach or suggest the limitations of claim 1 along with having a linear circuit comprises a photodiode electrically connected to an amplifier and the tunable filter electrically connected to the amplifier wherein the amplifier receives an output signal from the photodiode and provides an amplified signal to the tunable filter with the control circuit comprises a digitally controlled variable resistor. Also none of the references of record teaches the limitations of claim 1 with the tunable filter comprises one or more varactors and the control circuit comprises a tunable DC voltage source and control circuit comprises a reference voltage source, one or more comparators, a first voltage divider, a second voltage divider wherein one or more comparators compare a signal from the sensor(s) with a reference voltage output by the first voltage divider and modifies the reference voltage to substantially equal a predetermined optimum control voltage which is input to the second voltage divider and the second voltage divider outputs a signal to the tunable filter and thus modifying the linear circuit transfer function according to the conditions determined by the sensors. Finally, none of the references of record teaches or suggests the limitations of claim 1 that further comprises a second filter connected between the tunable filter and the control circuit.

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Claims 17 and 18 are allowable over the teachings of Varasi et. al., '390 (discussed below) because neither Varasi et. al. and any of the other references of record teaches or suggests a method of adjusting an optoelectronic signal in a linear circuit (see claims 17 and 18 for the specific listed steps.)

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,3-5,7-8 and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Varasi et. al., U.S.P. No. 5,493,390.

Varasi et. al., U.S.P. No. 5,493,390 teaches (Figs.1-12) an integrated optoelectronic optical sensor/receiver comprising: a plurality of sensors 3 that sense parameters such as temperature and strain with a linear circuit 7 that includes a wavelength bandwidth tunable filter and an optical detector 9 (It is inherent that this detector can be an avalanche photodiode as is considered standard in optical detector circuits) that is routed to a control circuit 33 (control circuit includes memory) that generates a control signal that is input to the tunable filter (note the tunable filter appears to be a three-pole filter) and the control signal adjusts the linear circuits transfer function based on the control signal and uses a low pass filter 45 for noise filtration, which clearly, fully meets Applicant's claimed limitations.

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A copy of PTO-1449 will be included in this office action.

The following references are also cited by the Examiner as being pertinent prior art: Sonnichsen et. al., U.S.P. No. 6,098,022 (Figs.1-7), Hung, U.S.P. No. 6,333,941 (Figs.1-5), Sawyers et. al., U.S.P. No. 5,408,863 (Figs.1-3) and May, U.S.2004/0119981A1 (Figs.1-7).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. Healy whose telephone number is (571)272-2347. The examiner can normally be reached on Compressed Schedule Tues-Thurs. 7AM-4;30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571)272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian M. Healy Primary Examiner Art Unit 2883

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Brian Healy Printery Examiner